

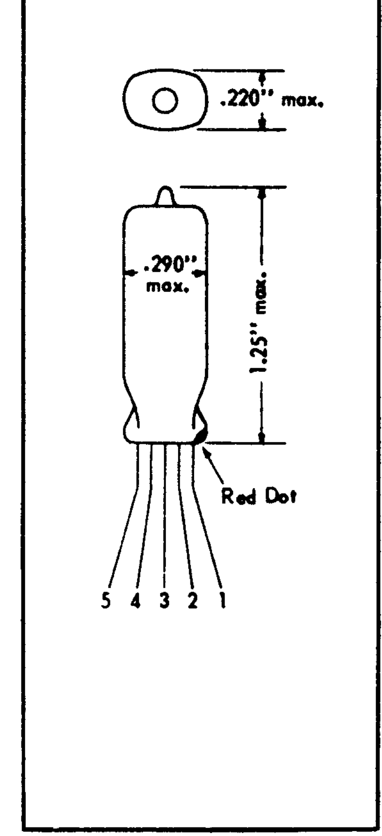
TECHNICAL INFORMATION

SUBMINIATURE PENTODE

TYPE CK6519

Excellence in Electronics

The CK6519 is a filament type pentode designed for use as a power amplifier in portable and wearable equipment. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.



MECHANICAL DATA

ENVELOPE: T-1½X2 Glass

BASE: None (0.016" tinned flexible leads. Length: 1.5" min. Spacing: 0.048" center-to-center)

TERMINAL CONNECTIONS: *(Red dot is adjacent to lead 1)*

Lead 1 Plate
Lead 2 Grid #2
Lead 3 Filament, Positive ✱
Lead 4 Grid #1
Lead 5 Filament, Negative ✱

MOUNTING POSITION: Any

ELECTRICAL DATA

RATINGS - ABSOLUTE MAXIMUM VALUES:

Filament Voltage	1.25±20%	volts
Plate Voltage	30	volts
Grid #2 Voltage	30	volts
Cathode Current	0.6	ma.

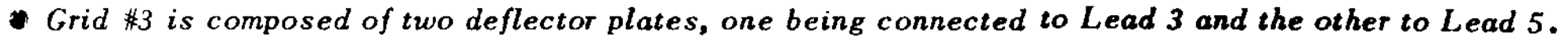
CHARACTERISTICS AND TYPICAL OPERATION:

Filament Voltage	1.25	volts
Filament Current	10	ma.
Plate Voltage	22.5	volts
Grid #2 Voltage	22.5	volts
Grid #1 Voltage ■	0	volts
No-Signal Plate Current	400	μa.
No-Signal Grid #2 Current	100	μa.
Signal Voltage (RMS) ♦	0.8	volts
Transconductance	450	μmhos
Plate Resistance	0.3	meg
Load Resistance	0.1	meg.
Distortion (approx.)	12	percent
Power Output	1.50	mw.

✱ *Grid #3 is composed of two deflector plates, one being connected to Lead 3 and the other to Lead 5.*

■ *Grid returned to negative filament thru 10 megohms.*

♦ *From a source having an internal impedance of 2 megohms.*



Printed in U.S.A.

Tentative Data

RAYTHEON MANUFACTURING COMPANY

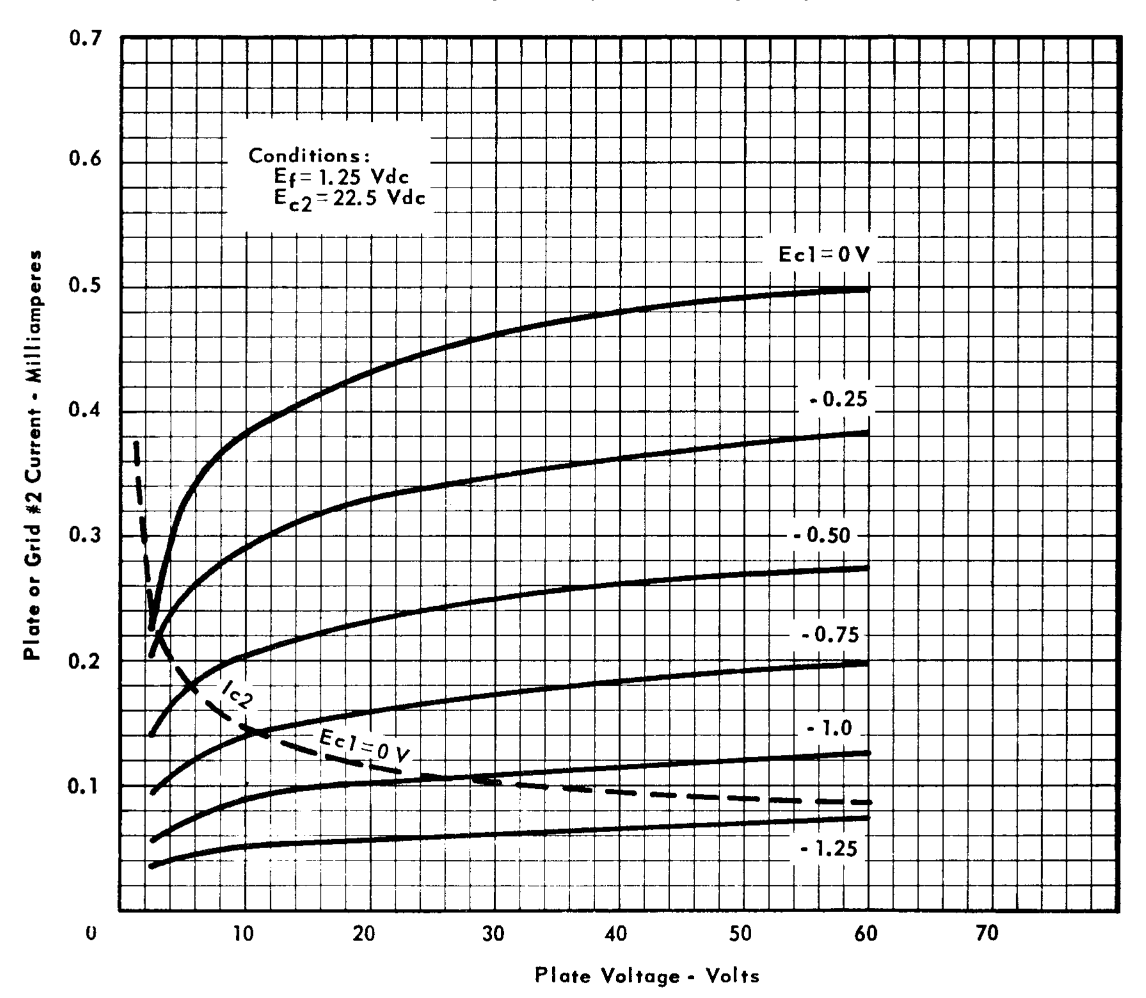
RECEIVING TUBE AND SEMICONDUCTOR OPERATIONS

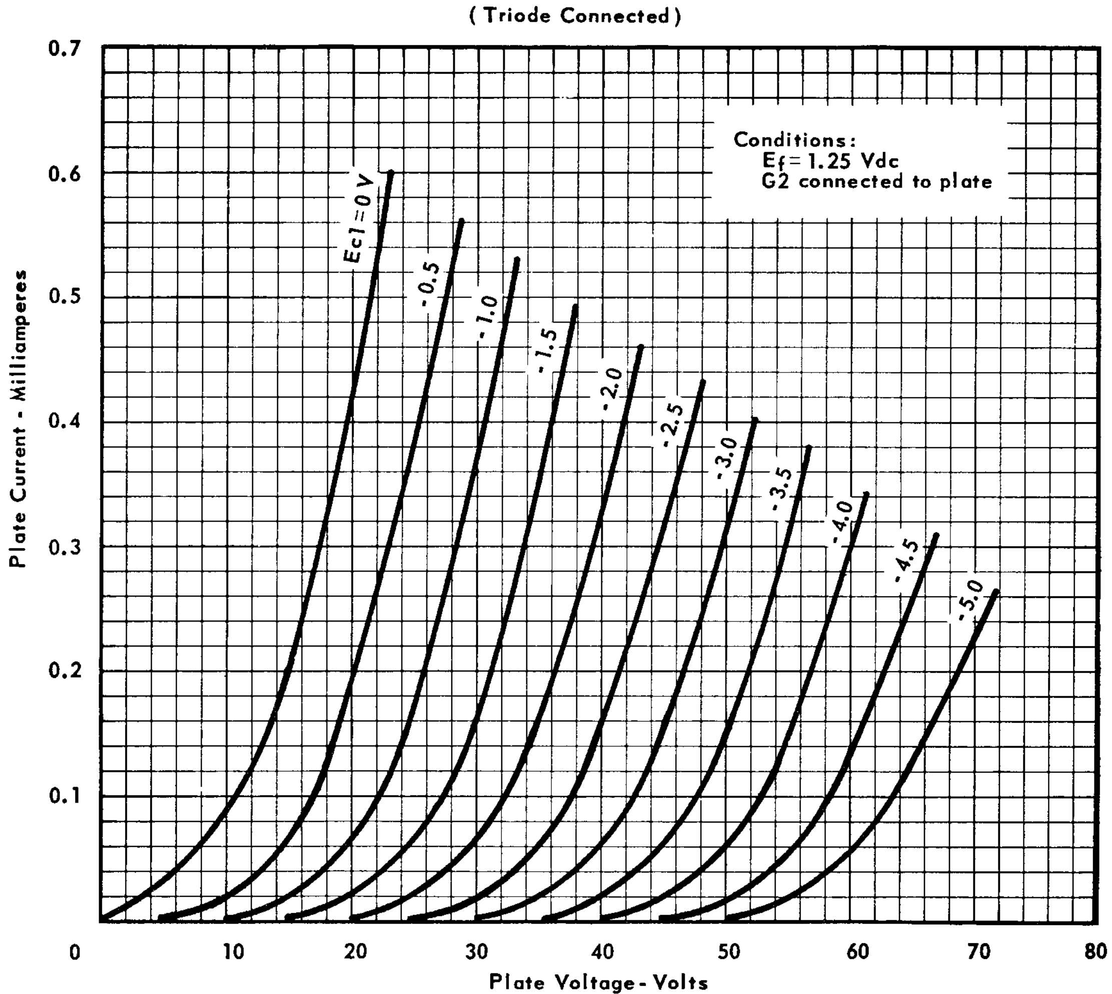
NEWTON 58, MASS.

November 1, 1955



AVERAGE PLATE CHARACTERISTICS





AVERAGE PLATE CHARACTERISTICS
(Triode Connected)
Conditions:
Ef = 1.25 Vdc
G2 connected to plate
Ec1 = 0 V
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
-4.5
-5.0
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
10
20
30
40
50
60
70
80
Plate Current - Milliamperes
Plate Voltage - Volts